aniLight 3 Mesh Light Switch User's Manual

(Ver 3.0.0 @ 2/14/2024)

aniLight 3 normally works on its own night light mode, but you could also set it to be used as a Bluetooth Low Energy Mesh (BLE Mesh) enabled light switch to turn on/off any BLE Mesh supported light bulb.

To enter BLE Mesh light switch mode:

- ① Power the unit off: Press and hold PWR button for 3 seconds until LED lights up in a greenyellow-red sequence.
- ⁽²⁾ Enter BLE Mesh light switch mode: Press and hold SET button. While SET button is held, press and hold PWR button for 3 seconds until LED lights up in a red-purple-blue sequence. Then release both buttons.

(To make it easier to remember, just remember that the final indicator color "blue" matches "Bluetooth").

Needed App:

Android app: Please search "nrf mesh" in Google Play Store and install the "nRF Mesh" app. iOS app: Please search "nrf mesh" in Apple App Store and install the "nRF Mesh" app.

To exit BLE Mesh switch mode and re-enter the normal light mode:

- ① Power the unit off: Press and hold PWR button for 3 seconds until LED lights up in a bluepurple-red sequence.
- ② Power the unit on normally: Press and hold PWR button for 3 seconds until LED lights up in a red-yellow-green sequence.

Setup aniLight 3 as BLE Mesh light switch

- 0. Make sure aniLight is turned on in its BLE Mesh mode, then start "nRF Mesh" app.
- 1. Press the "+" to add a mesh node.
- The app will scan and find the "aniLight-Con" node, select that node.
 Once aniLight is connected to App via BLE Mesh, a blue color indicator will light up.
- 3. Press "IDENTIEY".
- 4. Press "PROVISON".



- 5. Provision starts.
- 6. Provision ends, press OK.
- 7. Select "aniLight-Con" node.
- 8. Press the dropdown arrow in the Elements segment.



- 9. Select "Generic On Off Client".
- 10. Press "BIND KEY".
- 11. Select the "Application Key 1".
- 12. Press "SET PUBLICATION".

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- 13. Press "Publish Address".
- 14. Press the dropdown arrow of All nodes .
- 15. Select "Groups".
- 16. Select the "Living Room" group or create your own group, then press OK.



- 17. Press "APPLY".
- 18. The setup of aniLight to be a BLE Mesh light switch is now finished.
- 19. Press the back arrow on the title bar 2 times to return to the node list page.

Press "Disconnect" to disconnect aniLight from App.

Once disconnected, the blue color indicator on aniLight unit will be turned off.

aniLight uses more battery power when it is connected to App. So once the configuration is finished, please disconnect it from the App.

20. The connection button on the title bar is now changed to "Connect".



Setup a BLE Mesh light bulb so it could be controlled by aniLight

We will use "SYLVANIA A19" light bulb as an example.

- **0.** First turn on "SYLVANIA A19" light bulb to enter its setup mode (turn the light on/off 5 times utill the bulb is flashing colors). Press "ADD NODE" on the above last page.
- 1. The app will scan and find the "SYLVANIA A19" node, select that node.
- 2. Press "IDENTIEY".
- 3. Press "PROVISON".
- 4. Press OK when the "Select OOB Type" dialog pops up.



- 5. The provision starts.
- 6. When provision is finished, press OK.
- 7. Press the dropdown arrow on the first line of Elements segment.
- 8. Select "Generic On Off Server".



- 9. Press "BIND KEY".
- 10. Select "Application Ley 1"
- 11. Press "SUBSCRIBE".
- 12. Select the group you set with aniLight above, then press OK.

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- 13. Press back arrow on the title bar 2 times to return to the node list page.
- 14. Press "DISCONNECT".
- 15. The app is disconnected from light bulb. The button on title bar is now shown as "Connect".
- 16. When you need to connect any node again, just press "CONNECT", the app will scan and list all the nodes it has provisioned. Select any node in the list to connect.



Now the BLE Mesh light bulb configuration is finished.

For testing, you could press the PWR button on aniLight to toggle (turn on/off) the "SYLVANIA A19" light bulb.

When aniLight detects body motion in the dark, it will turn on the light bulb, then turn off the light bulb after specified delay time when it does not detect any further body motion.

17. To reset aniLight to be unprovisioned, press "Reset" at the bottom of "Node Configuration" page.

You can also press the PWR button on aniLight 3 unit 5 times continuously utill red LED flashes 3 times to perform a factory reset.

18. To remove a node from the node list, just slide the node to the left, and a "Delete Node" dialog will pop up, press YES to remove that node.

Please be aware, removing a node from the list will not reset the node's provision status. So once a node is removed from the list, the provisoned node will not be scanned/found by the App, and you could not press "ADD NODE" button to add that node again since the node is already provisoned and the "ADD NODE" only searches unprovisioned node. In that case, the only solution is to reset the node on its hardware to unprovisioned status, then add the node again.



Change aniLight settings with aniMesh app

Since it is very easy to change settings on aniLight unit, there is no special need to use an App to do the same job.

"aniMesh" Android app (available on Google Play Store) adds the "aniLight Settings Change" feature to the "nRF Mesh" app.

If you are using the "aniMesh" Android app, you could change the settings of the aniLight (such as Delay Time, Brightness, Light Color, etc.) from the app.

To do so, on the "Generic On Off Client" page (at step 18 above, also shown on the right), press "CHANGE" in the aniLight Settings segment ("nRF Mesh" app does not have that option).



- 1. Change aniLight settings here. You could select the "RGB Color" for aniLight.
- 2. Press "Color" button (its background color matches the light color) to change color.
- 3. Select a color from the color palette, then press "Confirm".
- 4. The background of "Color" button is now the new color you selected for aniLight. You need to press "Save" button to save the current settings to the aniLight. After finishing the settings change, remember to disconnect aniLight from app, and restart aniLight to enter the normal night light mode.



Please refer to https://www.anifree.com/anilight for the latest information.